

Date: Monday, 02/03/2009 9:05:11 AM  
 User: Julie Dawson

## Process Sheet

Split for 02/04/09  
 09.03.16

Customer : CU-DAR001 Dart Helicopters Services  
 Job Number : 46145 -1  
 Estimate Number : 10569  
 P.O. Number :  
 This Issue : 02/03/2009 S.O. No. :  
 Prsht Rev. : NC  
 First Issue : / / Type : SMALL / MED FAB  
 Previous Run : 44586  
 Written By :  
 Checked & Approved By : TUD 09.03.02  
 Comment : A 05.11.14 New issue EC

Drawing Name : STRUT WELDMENT ASS'Y  
 Part Number : D34437  
 Drawing Number : D3443 REV.B  
 Project Number : N/A  
 Drawing Revision : B  
 Material :  
 Due Date : 16/03/2009 Qty: 20 Um: Each

Additional Product

Job Number:



Seq. #:

Machine Or Operation:

Description:

1.0

M304TR0750W120

304 ss round tube .750 x .120w



(17X)

Comment: Qty.: 0.7875 f(s)/Unit Total: 15.7500 f(s)  
 AISI 304 SS seamless tubing 0.750" OD x 0.120" wall  
 (M304TR0750W120)  
 Batch: M110672

M111097 (3X)

M-L 09/03/03

2.0

BRAKE NC

NC BRAKE



Comment: NC BRAKE  
 1- Form as per Dwg D3443 using DT8117  
 2- Deburr per dwg D3443

FF 09-03-02

M-L 09/03/12

3.0

SMALL FAB 1

SMALL &amp; MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1  
 GRIND RAD PER DWG

M-L 04/03/12

4.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

209-03-13

(PTU)

5.0

MILLING CONV.

CONVENTIONAL MILLING MACHINE



Comment: CONVENTIONAL MILLING MACHINE  
 1- Mill end to length and drill hole as per dwg D3443  
 2-Deburr as per dwg D3443

09/03/18

8 pcs

W/O:









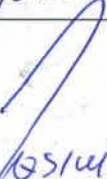

## WORK ORDER CHANGES

DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3443-7 PAR #: NIA Fault Category: Prod / FMS ASS' mod + Small NCR: Yes No DQA: D Date: 09/03/12  
 Resolution: SCRAP Disposition: SCRAP QA: N/C Closed: D Date: 09/03/12

NCR: 46145

## WORK ORDER NON-CONFORMANCE (NCR)

DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
09/03/12	1	at the set up when forming flat parts one part was <del>over bent</del> suppose to be .200 <sup>+0.00</sup> -0.30 and put at .208 R.C process		put batch # on part keep to make D3443-5 & replace Qty 1	M.H. SO 09/03/12	09/03/12		
								
09/03/10	4.0	8 parts are scrap. Wall thickness <del>is</del> ranges from 0.105-0.110". Minimum allowable tolerance is 0.108, from 0.120. R.C wall thickness inconsistent		8 remaining acceptable with wall thickness of 0.110" and over. This is 0.002" above minimum tolerance. Scrap is destroyed & unacceptable parts.	 09/03/18	09/03-23		

NOTE: Date &amp; initial all entries



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## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: STRUT WELDMENT ASSY

Job Number: 46145

Part Number: D34437

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC2

INSPECT PARTS AS THEY COME OFF MACHINE



*09/03/18*



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

7.0

QC8

SECOND CHECK



Comment: SECOND CHECK

8.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: *WA*

9.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



*WNE*  
*09-03-18*

W/O:

## WORK ORDER CHANGES

DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:

## WORK ORDER NON-CONFORMANCE (NCR)

DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date &amp; initial all entries



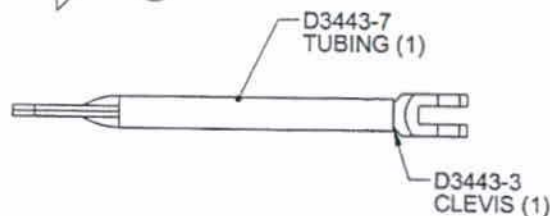


**DART**

DESIGN RF	DRAWN BY RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. <b>D3443</b>	REV. B SHEET 1 OF 3
DATE <b>05.12.05</b>	TITLE <b>STRUT WELDMENT ASSEMBLY</b> SCALE 1:4		
A	05.09.02	NEW ISSUE	
B	05.12.05	ADDED -9 PIN; REMOVED BALL PLUNGER; REVISE TOLERANCE; & $\phi 0.125$ WAS #30	

**RELEASED**05.12.09 *[Signature]*PRESS FIT McMASTER-CARR P/N 63215K32  
BALL JOINT BEARING AFTER POWDER COAT

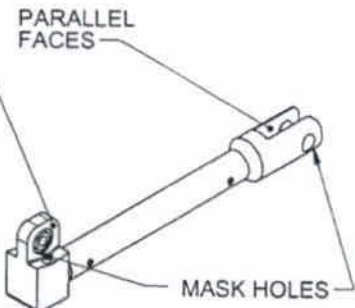
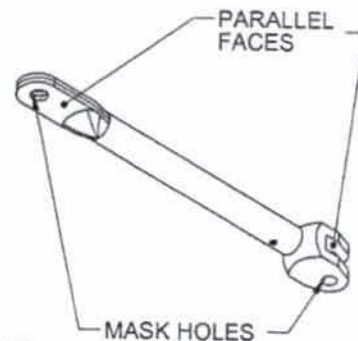
8.54

INSTALL SPAENAUER  
P/N 238-805 DOWEL PIN  
(TYP)0.10  
(TYP)INSTALL SPAENAUER P/N 238-805  
DOWEL PIN

0.10

**NOTES:**

- 1) WELD PER DART QSI 004
- 2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) IDENTIFY WITH DART P/N USING FINE POINT PERMANENT INK MARKER

**D3443-041****D3443-043**STOP COPY  
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WORK ORDER

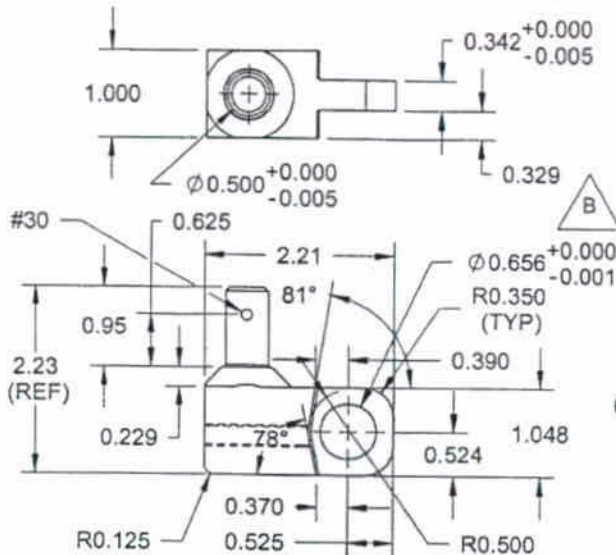
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DATE <b>05.12.05</b>	TITLE <b>STRUT WELDMENT ASSEMBLY</b> SCALE 1:2		

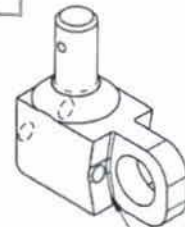
**RELEASED**

05.12.04 #

0.05 x 45  
CHAMFER

R0.032

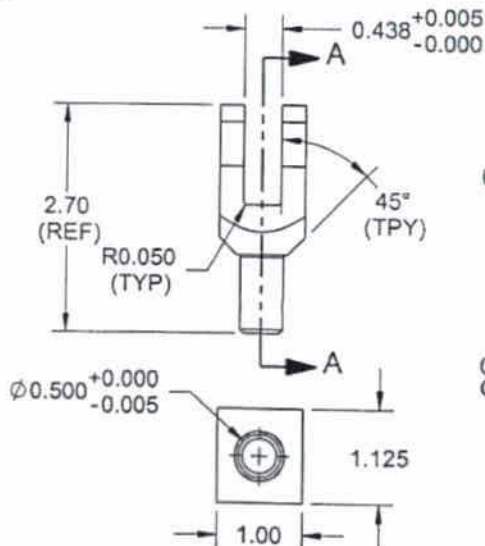
0.470 (TYP)

R0.032  
(TYP)1/4-28 UNF 2B  
(2 PLACES)

0.165 (TYP)

**D3443-1 NOTES:**

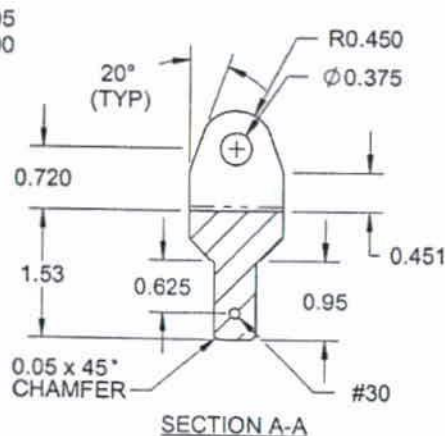
- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC M17-4B)

**D3443-1 LUG****D3443-3 NOTES:**

- 1) MATERIAL: AISI 304 SS ROUND BAR (REF. DART SPEC M304R)

**GENERAL NOTES:**

- 2) FINISH: NONE  
3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED  
4) ALL DIMENSIONS ARE IN INCHES  
5) BREAK ALL UNMARKED SHARP EDGES 0.005 TO 0.010



SECTION A-A

**D3443-3 CLEVIS**

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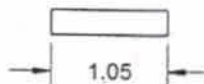
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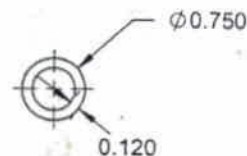
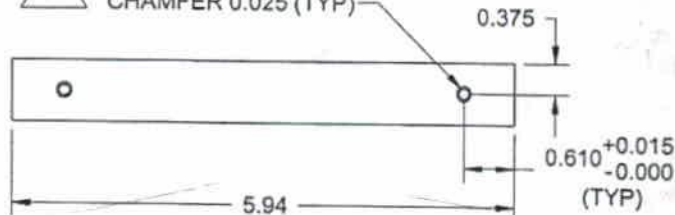
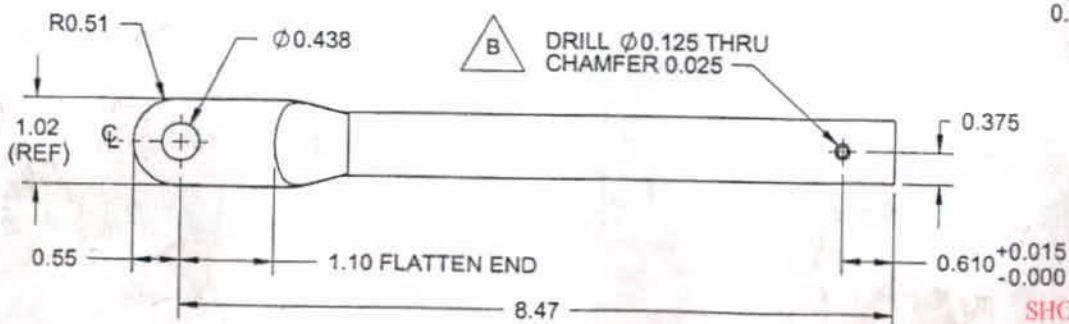
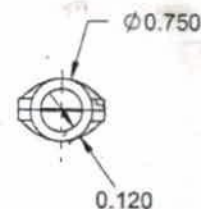
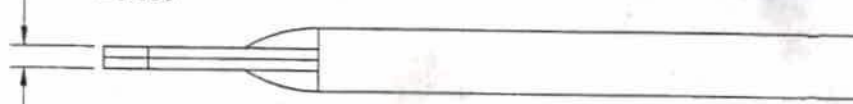
DESIGN RF	DRAWN BY RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D3443	REV. B SHEET 3 OF 3
DATE 05.12.05	TITLE STRUT WELDMENT ASSEMBLY 1:2		

 $\phi 0.210^{+0.005}_{-0.010}$ **D3443-9 PIN****D3443-9 NOTES:**

- 1) MATERIAL: DELRIN II 150R OR ACETRON GP ACETAIL (REF. DART SPEC M-DELRIN-R)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES

**RELEASED**

05.12.05

DRILL  $\phi 0.125$  THRU  
CHAMFER 0.025 (TYP)**D3443-5 TUBING** $0.260^{+0.000}_{-0.030}$ **D3443-7 TUBING****D3443-5/-7 NOTES:**

- 1) MATERIAL: AISI 316/304 SS SEAMLESS TUBING (REF. DART SPEC M304TR0.7500W.120)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL UNMARKED SHARP EDGES 0.005 TO 0.025

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